

Meatwad has decided to get rid of his old-school flip-phone and get a smart-phone. He has asked you to draw the budget lines for several different phone plans, including that for his old flip-phone, so that he can have a visual depiction of his budget and options.

Put the “composite good” ( $P_c = \$1$ ) on the y-axis, and “phone minutes” or “MB of data”, as appropriate, on the x-axis. Assume in each case that his monthly budget ( $I$ ) is \$100.



For each of the scenarios described, draw a budget line, label the axes (e.g., “MB of data”) and the intercepts showing quantities. Draw a different graph for each scenario, and label each graph with the phone company providing the service.

1. Meatwad used **AT&T** for his flip phone, and paid a \$30 monthly fee for the service, plus 10¢ per minute to talk for the first 300 minutes. Beyond 300 minutes, the price increases to 20¢/minute. There was no texting or data.
2. **Project Fi**'s plan includes unlimited calls and texts for a \$20 base fee. Data is billed at \$10/GB, or \$1 per 100MB.
3. **Verizon**'s plan includes unlimited calls, texts, and data for \$80.
4. After watching the TV add for the **Jitterbug** “Smart” phone plan, and realizing how much he admires old folks, Meatwad is seriously considering their plan. It includes unlimited talk and text and 100 MB of data for a flat \$50 fee. The next 200 MB of data is \$10. Each additional MB of data is 10¢.
5. Finally, after being overwhelmed by all the choices available to him, Meatwad goes back to using his flip phone and a **Sprint** plan slightly better than that in (a): He pays a flat monthly fee of \$50, which includes 500 minutes. He can buy one additional block of 100 minutes for \$5, and beyond that, each additional minute is 20¢.